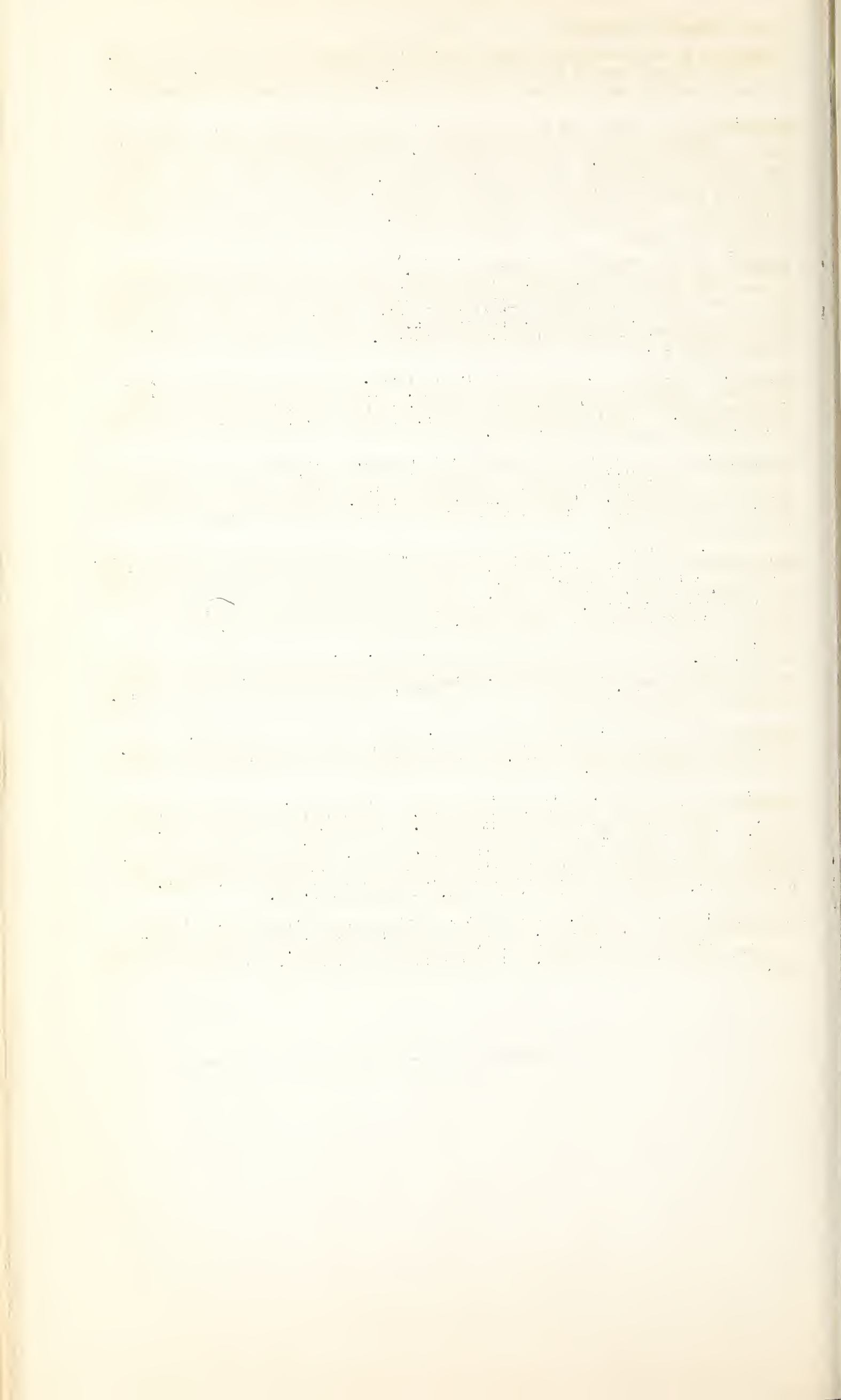


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, July 21, 1936.

Issued jointly by the Division of Crop and Livestock Estimates and the Weather Bureau.  
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

THE PAST WEEK WAS EXTREMELY HOT AND DRY, CAUSING DROUTH CONDITIONS TO BECOME MORE ACUTE IN THE CENTRAL PART OF THE STATE, AND CROPS AND RANGES TO DETERIORATE GENERALLY WHERE NOT IRRIGATED. LESS BENEFIT THAN EXPECTED WAS DERIVED FROM LAST WEEK'S RAINS AND BRIEF COOL SPELL BECAUSE OF THE RAPID RATE OF RUNOFF AND POOR ABSORPTION OF THE RAINFALL AND THE EARLY RETURN AND CONTINUANCE OF THE HOT, DRY WEATHER. MANY DRYLAND AREAS IN THE CENTRAL AND EASTERN PARTS ARE NOW SO PARCHED THAT FURTHER DETERIORATION OF CROP AND RANGE CONDITIONS IS NOT POSSIBLE. A GREAT MANY FARMERS AND RANCHERS IN THE DROUTH AREA ARE WITHOUT CROPS OF ANY KIND, AND HAVE, OR WILL HAVE TO DISPOSE OF ALL LIVESTOCK BEYOND WHAT ARE NEEDED FOR WORK STOCK AND POSSIBLY A SMALL FOUNDATION HERD FOR WHICH FEED MUST BE LARGELY SHIPPED IN.

WEATHER CONDITIONS WERE FAVORABLE FOR HAYING AND THE HARVESTING OF SMALL GRAINS AND PEAS. CUTTING OF WILD HAY IS NOW IN FULL SWING IN THE WEST WITH THE SECOND CROP OF ALFALFA ALSO READY FOR CUTTING IN SOME PLACES. ONLY A LIGHT SECOND CROP OF ALFALFA WILL BE CUT WITH PRACTICALLY NONE IN THE EASTERN TWO-THIRDS OF THE STATE EXCEPT WHERE IT IS UNDER IRRIGATION. THIS YEAR'S NEW SEEDINGS OF ALFALFA, CLOVER, AND CRESTED WHEAT GRASS HAVE BEEN MOSTLY FAILURES EAST OF THE DIVIDE AND ONLY FAIR WEST OF THE DIVIDE BECAUSE OF POOR GROWING CONDITIONS MOSTLY THE RESULT OF EXTREME HEAT OR DROUTH.

WINTER WHEAT HAS RIPENED RAPIDLY, MUCH PREMATURELY BECAUSE OF THE HEAT. HARVESTING OF WINTER WHEAT IS UNDERWAY IN SCATTERED PARTS OF THE STATE, AND IS EXPECTED TO BECOME GENERAL IN THE NEXT FEW DAYS. YIELDS SO FAR HAVE BEEN VERY LOW ON DRYLANDS AND ABOUT AVERAGE ON IRRIGATED TRACTS. PRACTICALLY NO DRYLAND CROPS REMAIN TO BE HARVESTED IN THE EAST EXCEPT TO POSSIBLY GET BACK SEED FROM A FEW THIN STANDS OF WINTER WHEAT IN THE SOUTHEAST, AND FROM SOME SPRING WHEAT IN THE NORTH-EAST THAT WAS HELPED BY RECENT RAINS. SPRING GRAINS ON DRYLANDS IN THE CENTRAL PART SUFFERED SEVERELY DURING THE PAST WEEK AND ALSO DETERIORATED TO SOME EXTENT IN THE HITHERTO GOOD GROWING SECTIONS WEST OF THE DIVIDE. SPRING WHEAT IS TURNING COLOR GENERALLY, BUT HEAT AND DROUTH HAVE BEEN DETRIMENTAL FOR FILLING. A LITTLE HAS BEEN HARVESTED IN THE YELLOWSTONE VALLEY. BARLEY CUTTING IS ALSO STARTING. CORN SHRIVELLED WHERE NOT HELPED BY RECENT MOISTURE. IT HAS TASSELLED SHORT, AND EARS APPEAR SMALL. RECENT MOISTURE THAT FELL IN THE EAST ENCOURAGED PLANTING OF SOME MILLET AND CANE, BUT MORE RAIN IS NEEDED IF IT IS TO MAKE A FORAGE CROP. BEETS, POTATOES, AND GARDENS ARE GOOD WHERE IRRIGATED, AND GRAINS UNDER IRRIGATION ARE ALSO IN GOOD CONDITION AS A RULE, ALTHOUGH SOME HAS BEEN LOST THROUGH FAILURE OF THE WATER SUPPLY AND DAMAGE FROM GRASSHOPPERS.

RANGES CONTINUED DRYING UP, WITH GRASS REPORTED SHORT AND BRITTLE, IF AVAILABLE AT ALL, ON THE LOWER RANGES IN THE DROUTH SECTIONS. WHILE RAINFALL SLOWED UP OR STOPPED THE MOVEMENT OF LIVESTOCK IN THE EAST, IT CONTINUED HEAVY AND INCREASED IN THE CENTRAL PART. MANY HOLDING THEIR LIVESTOCK NOW WILL BE FORCED TO SELL BEFORE WINTER IN VIEW OF THE CRITICAL FEED SITUATION. LIVESTOCK CONTINUED TO LOSE FLESH IN MANY OF THE EASTERN DISTRICTS, AND WHILE THEIR PRESENT CONDITION IS ONLY FAIR, THEY CAN STILL BE MOVED WITHOUT LOSS. THE CONDITION OF LIVESTOCK REMAINS GOOD TO EXCELLENT IN THE WEST. SHEEPMEN WITH LAMBS UNDER CONTRACT FOR FALL DELIVERY ARE ENCOUNTERING A BAD SITUATION IN NOT BEING ABLE TO FIND SUITABLE FEEDING RANGE FOR PUTTING WEIGHT ON THE LAMBS. A CONSIDERABLE AMOUNT OF HAY IS BEING MOVED TO THE DROUTH SECTIONS. WATER IS LOW AND DWINDLING RAPIDLY IN THE CENTRAL PART.

GRASSHOPPERS ARE STILL DOING CONSIDERABLE DAMAGE, ALTHOUGH THEY ARE REPORTED TO HAVE GRADUALLY THINNED OUT IN SOME OF THE MORE HEAVILY INFESTED AREAS OF THE SOUTH. FORESTS ARE EXTREMELY DRY AND SEVERAL BAD FIRES HAVE BEEN REPORTED.

WEEKLY TEMPERATURE AND PRECIPITATION DATA

STATION:	TEMPERATURE		TOTAL PRECIPITATION		PERCENT OF POSSIBLE SUNSHINE.
	HIGHEST	LOWEST	THIS WEEK.	SINCE APR. 1	
BILLINGS .....	104	61	0.12	4.53	*
BOZEMAN .....	95	57	0.02	4.45	*
CUT BANK .....	101	53	0.00	3.84	*
GLASGOW .....	112	61	0.10	3.61	*
GLENDALE .....	111	63	0.01	4.63	*
GREAT FALLS .....	102	56	0.03	4.16	*
HAVER .....	108	60	0.04	2.53	84
HELENA .....	97	55	0.03	4.46	79
KALISPELL .....	98	54	0.00	3.90	98
LEWISTOWN .....	97	52	T	5.90	*
MALTA .....	105	60	T	2.70	*
MILES CITY .....	106	70	0.04	2.48	88
MISSOULA .....	102	58	0.00	4.58	96
POPLAR .....	108	60	0.00	3.26	*

\*NO DATA.

BEAVERHEAD: COOL WEATHER WITH LIGHT TO HEAVY SHOWERS THE PAST WEEK. HAYING STARTED IN WILD HAY SECTIONS. GRAIN AND PEA CROP GOOD, WITH A LITTLE AMOUNT OF HAIL DAMAGE. INSECT PESTS ABOUT THROUGH EXCEPT GRASSHOPPERS AND POISONING OF THESE WILL BE NECESSARY IN SECTIONS AFTER THE HAY IS UP.

BIG HORN: CONTINUED DRY AND PARCHING WEATHER. PRACTICALLY ALL DRY LAND CROPS A COMPLETE FAILURE EXCEPT A FEW WHEAT FIELDS WHICH ARE BEING CUT TO SALVAGE SEED FOR 1937. VALLEY CROPS ARE DOING FAIRLY WELL WITH INSECT DAMAGE LESSENING SOMEWHAT BY REASON OF WHAT APPEARS TO BE A GRADUAL DISAPPEARANCE OF THE GRASSHOPPERS AND CRICKETS. SOME CATTLE SHIPPED TO PASTURE, BUT MOST OF THE CATTLE GOING DIRECT TO MARKET. THERE IS A DEMAND FOR HAY AND FEED TO CARRY OVER WORK STOCK AND FOUNDATION CATTLE. PURCHASE OF SUCH FEED WILL BE LIMITED BY THE PRICE. MOST OF THE DRY LAND FARMERS ARE SEEING LATE FEED CROPS.

BLAINE: A VERY SMALL AMOUNT OF PRECIPITATION WAS RECEIVED IN A SMALL AREA IN THE NORTHEASTERN PART OF THE COUNTY THIS PAST WEEK. THE BALANCE OF THE WEEK WAS ACCOMPANIED WITH EXTREME HIGH TEMPERATURES WITH CONSIDERABLE WIND. GROWING CONDITIONS OUTSIDE OF THE IRRIGATED VALLEY EXTREMELY POOR. SOME FARMERS IN THE SOUTH-CENTRAL PART OF THE COUNTY ARE ATTEMPTING TO HARVEST SOME WHEAT. OUTSIDE OF THE IRRIGATED VALLEY THIS COUNTY WILL NOT PRODUCE 15% OF THE SEED REQUIRED TO PLANT 1937 CROPS. CROPS IN THE IRRIGATED VALLEY ARE FAIRLY GOOD AT THE PRESENT TIME. LIVESTOCK BEING RAPIDLY MOVED TO MARKET. ALL STOCK LOSING FLESH.

CARBON: WEATHER CONTINUES HOT AND DRY. LIGHT SHOWERS REPORTED ON SATURDAY, MONDAY, AND WEDNESDAY. HEAVY SHOWERS IN THE EXTREME NORTH END OF THE COUNTY. VERY LITTLE PRECIPITATION IN THE WESTERN PART. A FEW WHEAT CROPS ARE BEING HARVESTED AT THE PRESENT TIME, WHICH WILL HARDLY MORE THAN BRING BACK SEED. CONSIDERABLE ACREAGE OF GRAIN IN THE IRRIGATED SECTIONS HAS BEEN CUT FOR HAY WHERE THE HOPPER SITUATION IS BAD. GRAIN SUPPLIES AND HOPPER BAIT EXHAUSTED IN THE COUNTY AT THIS TIME. THE MOVEMENT OF LIVESTOCK SHIPPING BY TRUCK AND RAIL HAS CONTINUED THE PAST WEEK, MOST OF IT GOING TO THE BILLINGS MARKET.

CASCADE: HOT WINDS AND EXTREMELY DRY WEATHER HAVE CONTINUED TO DETERIORATE CASCADE COUNTY CROP PROSPECTS. THERE HAS BEEN NO PRECIPITATION THE PAST WEEK. RANGES IN THE LOW-LANDS ARE COMPLETELY DRY, AND STOCKMEN ARE FORCED TO MOVE THEIR CATTLE EITHER TO FEED OR TO MARKET, MOST OF THEM PREFERRING THE LATTER. HARVESTING OF THE SMALL PERCENTAGE OF WINTER WHEAT REMAINING IS UNDER WAY. YIELDS, HOWEVER, ARE VERY LOW, AND ONLY A SMALL PERCENTAGE OF WHEAT WILL BE HARVESTED. CROPS ON IRRIGATED LAND ARE DOING FAIRLY WELL. PROSPECTS FOR SUGAR BEETS, SEED PEAS, SMALL GRAINS AND ALFALFA HAY ARE FOR AN AVERAGE CROP. HAY IS MOVING RAPIDLY, AND IT IS EVIDENT THAT THE SUPPLY IS INSUFFICIENT TO FEED THE STOCK ON HAND. ADJUSTMENT WILL HAVE TO BE MADE EITHER BY SELLING CATTLE AND SHEEP OR SHIPPING IN FEED. LIVESTOCK ARE STILL IN FAIR CONDITION AND CAN BE MOVED WITHOUT LOSS.

CHOUTEAU: EXTREME HEAT REACHING TEMPERATURE OF 110 PREVAILED DURING THE WEEK WITH SCATTERED SHOWERS WHICH WERE OF LITTLE OR NO VALUE TO EITHER CROPS OR RANGES. WINTER WHEAT HARVEST UNDER WAY WITH VERY LIGHT YIELDS REPORTED. SPRING WHEAT VERY POOR AND MOST OF IT BEING CUT FOR HAY. IT IS DOUBTFUL IF ENOUGH WINTER AND SPRING WHEAT WILL BE PRODUCED FOR SEED. IF FAVORABLE MOISTURE CONDITIONS EXIST FOR FALL SEEING, IT WILL BE NECESSARY TO SHIP SEED INTO THE COUNTY. LIVESTOCK SITUATION BECOMING VERY ACUTE WITH LITTLE OR NO PASTURE, NO HAY, AND NO FEED RESOURCES. GRASSHOPPERS VERY PLENTIFUL IN ALL PARTS OF THE COUNTY.

CUSTER-POWDER RIVER: PRECIPITATION 1.00 INCH. GOOD RAIN OVER WEEK-END. LOWERED TEMPERATURES AND FILLED UP THE WATER HOLES IN SOME AREAS. WEATHER HAS TURNED HOT AGAIN SO BENEFICIAL EFFECT OF RAIN DISCOUNTED. IRRIGATED CROPS LOOK GOOD. FIRST CUTTING OF HAY HARVESTED AND SECOND CROP COMING ALONG NICELY. LEAF HOPPERS BOTHERING POTATOES, BUT GROWERS ARE BUSY ON CONTROL. RECENT RAIN CAUSED A FLOOD ON ONE OR TWO IRRIGATION PROJECTS, WHICH PROMISES A SECOND CROP OF HAY. NO DRY LAND CROPS TO CUT FOR EITHER GRAIN OR HAY. A FEW FARMERS MAY TRY TO SALVAGE SOME GRAIN FOR SEED. OLD GRASSHOPPER BAIT BEING REWORKED AND DISTRIBUTED IN COOPERATION WITH W.P.A. CATTLE STILL BEING SOLD AND SHIPPED ALTHOUGH THE RUSH HAS SUBSIDED. RAIN HAS RELIEVED THE WATER SITUATION TEMPORARILY BUT WILL MAKE NO GRASS. SOME STOCKMEN ON THE CUSTER NATIONAL FOREST AND OTHER HIGHER REGIONS MAY BE ABLE TO CARRY STOCK UNTIL EARLY FALL. MOST OUTFITS HAVE BEEN SELLING COWS AND CALVES AND HOLDING YEARLINGS UNTIL THE FEEDER SEASON BEGINS.

DANIELS: RAIN THIS PAST WEEK IN NORTH AND WESTERN PORTION OF COUNTY; SOMEWHAT HEAVIER SHOWER IN EASTERN PORTION. PRECIPITATION AT SCODEY .93. DRY, HOT WINDS PREVAILING THE LAST FEW DAYS. CROP CONDITIONS ARE POOR. LIGHT RAIN WILL HELP SOME OF THE CROPS. SOME FIELDS WILL BE CUT FOR GRAIN AND WILL YIELD ONLY ENOUGH FOR SEED.

DAWSON: GOOD RAINS DURING FOREPART OF THE WEEK OVER MOST OF THE COUNTY. MOISTURE SHOULD BE OF BENEFIT TO LATER CORN AND TO POTATOES; OTHERWISE OF NO GREAT VALUE. POSSIBILITY OF SOME FEED CROP PRODUCTION AND THISTLES. WATER SITUATION HELPED BY MOISTURE. NO DECIDED MARKETING ACTIVITIES UNDER WAY. HOPPERS CONTINUE TO BE DESTRUCTIVE IN SOME AREAS.

FALLON-CARTER: THREE DAYS OF COOL WEATHER WITH CONSIDERABLE SHOWERS AND RAIN, BUT THE FOUR DAYS FOLLOWING AGAIN HOT AND DRY WITH PARCHING WINDS. RAIN COVERED BOTH COUNTIES, BUT NO PERMANENT GOOD HAS RESULTED EXCEPT TO FILL RESERVOIRS WHERE THE WATER WAS LOW. CATTLE MOVING OUT RAPIDLY. A FEW BUYERS PURCHASING SOME STOCK AND A CONSIDERABLE NUMBER HAVE SHIPPED TO CENTRAL MARKETS. STILL TREMENDOUS NUMBER OF STOCK TO BE MOVED, AND MOST STOCK IS LOSING WEIGHT. SHEEPMEN IN SERIOUS CONDITION. LAMBS CONTRACTED FOR FALL DELIVERY ARE NOT PUTTING ON MUCH WEIGHT. IT WILL BE NECESSARY TO DISPOSE OF EWES AND LAMBS NOW OR SHIP OUT TO FEED. EVERY FARMER AND STOCKMAN IN NEED OF AND LOOKING FOR WORK.

FERGUS: EXTREMELY HOT, DRY WEATHER DURING THE WEEK RIPENED UP THE REMAINING WHEAT VERY FAST. HARVEST WILL BE WELL UNDER WAY DURING THE NEXT WEEK. SOME WHEAT CUT BY BINDERS NOW IN SHOCK. NO SECOND CROP OF ALFALFA IN SIGHT AT ALL IN ANY PART OF THE COUNTY EXCEPT WHERE IRRIGATION WATER IS AVAILABLE. GRASSHOPPERS ARE CUTTING HEADS OF WHEAT IN SOME SECTIONS AND DOING CONSIDERABLE DAMAGE. THEY ARE MOVING WITH THE WIND NOW AND ARE NUMEROUS ON THE RANGE AND ABANDONED CROP LAND.

**FERGUS: (CONT'D.)** POISON IS OF LITTLE VALUE, 45 CARLOADS OF CATTLE FROM FERGUS COUNTY WERE SHIPPED THIS WEEK. CATTLE IN SOME SECTIONS BEGINNING TO LOSE FLESH.

**FLATHEAD:** NO PRECIPITATION EXCEPTING A FEW LOCAL THUNDER SHOWERS. EXTREME HEAT CAUSING A VISIBLE SHRINKING IN HAY SUPPLIES AND PROSPECTIVE GRAIN CROP EACH DAY. TEMPERATURE TODAY 94 IN THE SHADE. WINTER WHEAT RIPENING UP. FARMERS MOWING AROUND THEIR FIELDS PREPARATORY TO HARVEST. BARLEY BEGINNING TO TURN WITH HARVEST STARTING. SECOND CROP OF HAY POOR. POTATOES LOOK GOOD. PASTURES ON THE FARMS GETTING QUITE DRY. LIVESTOCK IN GOOD SHAPE. SOME AREAS HAVE PASTURE TO CARRY STOCK UNTIL SNOW COMES. A FEW LOCAL OUTBREAKS OF WEB WORMS.

**GALLATIN:** INCREASING TEMPERATURES AND DRYING WINDS DURING THE WEEK. PARTLY CLOUDY; LOCAL SHOWERS IN WEST PART OF COUNTY. WINTER WHEAT HARVEST STARTED AND MUCH OF THE EARLY PLANTED SPRING GRAIN IS RIPENING FAST. TIMOTHY AND CLOVER HAYS BEING STACKED. BALING AND SHIPPING OF ALFALFA CONTINUES. ONLY A FEW OF THE VERY EARLY RIGHT DITCHES NOW HAVE WATER. CANNING PEA HARVEST NEARING COMPLETION.

**GARFIELD - PETROLEUM:** PRECIPITATION, APPROXIMATELY .57 INCH, CAME TO A LARGE PORTION OF THE COUNTY, AND WAS HELPFUL IN REDUCING THE HIGH TEMPERATURES AND WILL NOT BE A VERY GREAT BENEFIT TO CONDITIONS UNLESS MORE PRECIPITATION FOLLOWS ALMOST IMMEDIATELY. FARMERS ARE FINISHED WITH HARVESTING OF CROPS FOR HAY. THE PRECIPITATION OF THE PAST WEEK HAS BEEN FAVORABLE TO THE LIVESTOCK CONDITION BY REPLENISHING WATER HOLES, AND MAKING IT POSSIBLE FOR CATTLE TO GRAZE ON THE MORE DISTANT RANGES. LIVESTOCK CONDITIONS REMAIN ABOUT THE SAME AS TO FLESH AND A RATHER SMALL BUT CONTINUED MARKETING IS APPARENT. LABOR ABUNDANT.

**GLACIER:** SCORCHING HEAT; BLISTERING WINDS; EXTREMELY DRY; SLIGHT PRECIPITATION. THERE WAS NO RELIEF THIS WEEK FROM THE DROUGHT. CROPS AND RANGES DEPRECIATED FURTHER. A SMALL AREA ALONG GLACIER PARK IS STILL IN FAIRLY GOOD CONDITION, BUT OUT ON THE PLAINS THE CARRYING CAPACITY OF THE RANGES IS VERY LOW. SOME FARMS WILL HARVEST ABSOLUTELY NOTHING. THERE WILL BE ENOUGH SEED HARVESTED FOR THE COUNTY, BUT AS THE MEN WHO WILL NEED IT WILL HAVE NO BUNDS, SOME OF THE SEED WILL BE SHIPPED OUT AS MARKET GRAIN. HOPPERS DOING SOME DAMAGE ALTHOUGH NOT EXCESSIVE. A FEW CARLOADS OF STOCK WENT TO MARKET THIS WEEK DUE TO SHORT GRASS; SHIPPED FROM BROWNING AND CUT BANK. BREEDING HERDS WILL BE REDUCED. WATER SITUATION IS GOOD ALONG MOST STREAMS RUNNING FROM THE ROCKIES, ALTHOUGH SOME ARE DRIED UP OR RUNNING VERY LOW. SOME AREAS HAVE BEEN ABANDONED AS SUMMER RANGE DUE TO DRYING UP OF RESERVOIRS AND SPRINGS.

**HILL:** CONTINUED EXTREME TEMPERATURES THROUGHOUT THE LAST WEEK, WITH PRACTICALLY NO PRECIPITATION, HAVE MADE THE SITUATION MORE EXTREME. RANGES CONTINUALLY BECOMING SHORTER. LIVESTOCK BARELY HOLDING THEIR OWN, WITH A CONTINUED SHIPMENT OF LIVESTOCK OUT OF THE TERRITORY.

**JUDITH BASIN:** LIGHT LOCAL SHOWERS IN THE WESTERN PART OF THE COUNTY. NO MATERIAL BENEFIT DERIVED FROM RECENT RAINS. HIGH TEMPERATURES AND HOT WINDS GENERAL THROUGHOUT THE COUNTY. MOST OF THE SPRING WHEAT WILL BE CUT FOR HAY. OVER 50% OF THE CROPS WILL NOT BE HARVESTED FOR GRAIN. PRACTICALLY ALL OF THE HAY CROP NOW IN THE STACK, AND LITTLE PROSPECT OF SECOND GROWTH. LIVESTOCK STILL IN GOOD CONDITION. RANGE GETTING SHORT IN MOST PARTS OF THE COUNTY. PROSPECTS FOR WINTER RANGE VERY POOR UNLESS HEAVY RAINS SHOULD OCCUR IN THE NEAR FUTURE. W.P.A. CRICKET PROJECT DISCONTINUED ON ACCOUNT OF THE FACT THAT CRICKETS ARE SCATTERED AND TREATMENT IS ONLY PARTIALLY EFFECTIVE. GRASSHOPPER SITUATION SERIOUS.

**LAKE:** WARM DRY WEATHER PREVAILED, BUT DID NOT AFFECT CROP MORE THAN NORMAL OF THIS SEASON. PEAS AND WINTER WHEAT ARE BEING HARVESTED. YIELDS NORMAL FOR PEAS, BUT LOW FOR THE AVERAGE WINTER WHEAT. THE SECOND CUTTING OF ALFALFA JUST STARTED. SALES OF ALFALFA HAY MADE BY A FEW FARMERS THIS WEEK. PASTURES DRY, BUT NOT A SHORTAGE, NOR WILL THERE BE ANY SURPLUS UNTIL AFTER HARVEST. A FEW FARMERS POISONING HOPPERS.

**LEWIS & CLARK - BROADWATER:** GENERALLY DRY CONDITIONS REDUCED CROP PROSPECTS. MOVEMENT ON FOOT IN ONE LEWIS & CLARK COMMUNITY TO SUPPLY PUBLIC WORK TO A FEW FARM FAMILIES. AUGUSTA AREA MOISTURE DEFICIENCY BECOMING SERIOUS. FIRST CUTTING OF ALFALFA HAY WELL ALONG IN STACK. WEB WORM MILLERS OCCURRING IN LARGE NUMBERS GENERALLY OVER BOTH COUNTIES. GRASSHOPPERS MAKING INROADS ON RANGE. WATER SUPPLIES SHORT IN SOME INDIVIDUAL PLACES IN AUGUSTA AREA.

**MADISON - JEFFERSON:** SHOWERS FURNISHED VARYING AMOUNTS OF MOISTURE THROUGHOUT NEARLY EVERY PART OF MADISON AND THE SOUTHERN HALF OF JEFFERSON COUNTIES, BUT DID NOT ADD GREATLY TO THE SOIL MOISTURE. CROP CONDITIONS CONTINUED EXCELLENT THROUGH THE IRRIGATED SECTIONS OF BOTH COUNTIES DURING THE PAST WEEK. GRAIN, AND PEA CROPS ARE THE BEST IN SEVERAL YEARS. RANGE GRASSHOPPERS HAVE SHOWN A TENDENCY TO MOVE INTO CROPS ON THE UPPER RUBY RIVER, AND ON THE EAST SIDE OF MADISON AND JEFFERSON COUNTIES HAVE TAKEN MUCH OF THE WINTER AND SPRING WHEAT. CONDITIONS INDICATE A NORMAL WINTER WHEAT CROP IN NORTHEASTERN JEFFERSON COUNTY. RANGE CONDITIONS VARY THROUGHOUT THE AREA, DEPENDING ON THE GRASSHOPPER INFESTATION, THE RANGE HAVING BEEN SERIOUSLY DAMAGED IN JEFFERSON COUNTY AND THE EAST HALF OF MADISON COUNTY.

**MISSOULA:** HOT AND DRY ALL WEEK, EXCEPT ONE THUNDER SHOWER ACCOMPANIED BY HAIL, WHICH COVERED PARTS OF THE COUNTY. HAIL DAMAGE TO FRUIT, PEAS, AND SOME GRAIN REPORTED FROM A FEW COMMUNITIES. HARVEST OF FIRST CROP OF ALFALFA COMPLETED IN ALL COMMUNITIES; SECOND CROP NOT STARTED YET. HAYING IN PROGRESS IN THE HIGHER VALLEYS. GOOD YIELDS REPORTED. WINTER GRAINS RIPENING, BUT CUTTING NOT STARTED. SPRING GRAINS FILLING AND RIPENING. SEED PEAS READY TO CUT IN MOST LOCALITIES. SUGAR BEETS AND POTATOES MAKING GOOD GROWTH. UPPER RANGES GOOD. LOWER RANGES DRIED UP. CATTLE IN GOOD CONDITION. VERY LITTLE, IF ANY, RANGE AVAILABLE FOR OUTSIDE STOCK.

**MISSELSHELL - GOLDEN VALLEY:** THERE WAS ONE INCH OF PRECIPITATION; HOWEVER, THERE HAVE BEEN SOME DRY WARM WINDS SINCE, WHICH DISCOUNTED THE BENEFICIAL EFFECTS. THE ONLY CROPS LEFT TO BE HARVESTED ARE THOSE IN TWENTY OR THIRTY ACRE TRACTS ISOLATED FROM GRASSHOPPERS OR IN SOME COULEE WHERE A LITTLE MORE MOISTURE HAD COLLECTED. IF WE HAVE MORE MOISTURE FOLLOWING WHAT WE HAVE HAD IN THE PAST WEEK, THERE IS A POSSIBILITY OF SECURING SOME FALL RANGE. THIS WILL ALSO BE TRUE WITH SOME ALFALFA FIELDS.

MUSSELSHELL - GOLDEN VALLEY: (CONT'D.) THE LIVESTOCK CONDITION IS JUST AS BAD OR WORSE THAN IT WAS A WEEK AGO, AND DOES NOT LOOK AS THOUGH THERE WILL BE A GREAT DEAL OF IMPROVEMENT.

PARK: DRY HOT WEATHER PREVAILED DURING THE WEEK. SEVERE CROP DAMAGE CONTINUED THIS WEEK DUE TO DRY WEATHER. IRRIGATED CROPS APPEAR ABOUT 75% OF NORMAL WHILE DRY LAND CROPS APPEAR ABOUT 20% NORMAL. IN MOST CASES LIVESTOCK ARE IN FAIR CONDITION. RANGE IS DRYING UP RAPIDLY AND IN SOME LOCALITIES GRASSHOPPERS ARE DOING CONSIDERABLE DAMAGE.

PHILLIPS: SCATTERED SHOWERS NOT SUFFICIENT TO RELIEVE DROUTH. COOL MONDAY AND TUESDAY. HOT LATTER PART OF WEEK. POOR GROWING CONDITIONS. DRY LAND CROPS ARE A FAILURE. ROTATION OF WATER IN IRRIGATED SECTION NECESSARY. FEED CROPS GENERALLY LIGHT IN VALLEY. GREEN BUG INFESTATION ON SOUTH BENCH FROM DODSON TO BOWDOIN. BUGS MIGRATED INTO PHILLIPS COUNTY WITHIN THE LAST TWO WEEKS. GRASSHOPPERS MIGRATING INTO IRRIGATED AREA FROM DRY LAND. W.P.A. BAIT HAS NOT ARRIVED. ABOUT 1000 HEAD STOCK SHIPPED TO MARKET THIS WEEK. CATTLE LOSING CONDITION DAILY IN SOUTHERN PART OF COUNTY. WATER SHORTAGE IN NORTH. LITTLE PROSPECT OF SALVAGING ANY GRAIN FOR FEED. MOVEMENT OF STOCK EXPECTED TO BE HEAVY FROM NOW ON.

PONDERA: HOT WEATHER ON WEDNESDAY AND FRIDAY OF THIS WEEK MATERIALLY DEPLETED PROSPECTS OF DRY LAND CROPS. TEMPERATURES RANGED FROM 102 TO 105 DEGREES IN THE SHADE. WHEAT:-- THE TOTAL ACREAGE OF COMPLETE LOSS OF WHEAT CAN NOW BE ESTIMATED IN EXCESS OF 60%, WITH APPROXIMATELY 35% OF NORMAL CROP ON THE REMAINING ACREAGE. SOME RAIN AT THIS TIME MIGHT HELP, BUT EACH DAY WHEAT IS DECREASING MORE RAPIDLY. IN LIKE MANNER, FEED CROPS SUCH AS OATS, BARLEY, AND FLAX ARE DISAPPEARING FROM THE POSSIBLE FIELD OF HARVEST. SOME GOOD CROPS REMAIN ON IRRIGATED LAND.

HAY CROP IS SHORT AGAINST NORMAL CROP, AND EVEN NURSE CROPS WITH LEGUMES ARE SUFFERING CONSIDERABLY. THE PERCENTAGE OF LIQUIDATION OF LIVESTOCK MAY INCREASE AS FEED SUPPLIES SHOW DECREASE. NO PARTICULAR DISTRESS IS NOTICEABLE AS OF THIS WEEK. PRACTICALLY ALL SUMMER GRASS IS NOW BURNED UP, EXCEPT IRRIGATED PERMANENT PASTURES WHICH ARE SUPPORTING SMALL HERDS OF DAIRY CATTLE AND A FEW BANDS OF SHEEP OR WORK HORSES. WATER HOLES ARE GETTING LOW.

PRAIRIE: VERY HEAVY RAIN FOR A SHORT TIME LAST SATURDAY EVENING, JULY 11TH. GOOD RAIN IN SEVERAL PLACES ON SUNDAY EVENING. THE REST OF THE WEEK THE TEMPERATURE HAS BEEN READING 100 DEGREES AND BETTER. NOT MUCH MOISTURE LEFT. SOME THISTLE GROWTH, BUT NO CROPS WILL COME UP. STOCK IS BEING SHIPPED OUT REGULARLY.

RICHLAND: HEAVY CLOUDBURSTS IN SCATTERED PORTIONS OF THE COUNTY DURING THIS PAST WEEK, THE RAIN VARYING FROM 15 MINUTES TO AN HOUR IN LENGTH, BUT MOST OF IT CAME DOWN TOO RAPIDLY TO BE ABSORBED. THE REPORTS VARIED FROM 1/4 TO 2 INCHES. FEED CONDITIONS ARE IMPROVED PROVIDING WEATHER CONDITIONS DO NOT CONTINUE TOO HOT AND MORE MOISTURE FOLLOWS. GRAIN FIELDS, IN GENERAL, ARE TOO ADVANCED TO BE BENEFITTED MUCH BY THE MOISTURE THAT FELL THIS PAST WEEK. HARVESTING OF SOME GRAIN WILL START THIS COMING WEEK. MANY FARMERS WILL NOT HAVE ANYTHING TO HARVEST AS THE DROUTH AND INSECT PESTS TOGETHER WITH HOT WINDS HAVE COMPLETELY DESTROYED THE ENTIRE CROP. SOME LIVESTOCK BEING MOVED ALTHOUGH GROWERS ARE RELUCTANT ABOUT SELLING LIVESTOCK. MANY GROWERS HAVE TURNED THEIR LIVESTOCK INTO GRAIN FIELDS.

ENCOURAGEMENT GIVEN FARMERS TO POISON GRASSHOPPERS IN THE IRRIGATED VALLEY AS HOPPERS ARE NOW APPEARING IN LARGE QUANTITIES AND ARE BEGINNING TO MOVE. THE BLISTER BEETLES HAVE CAUSED CONSIDERABLE LOSS IN BEET FIELDS AND SOME OF THE TRUCK GARDENS. DURING THE PAST THREE WEEKS MANY FIELDS HAVE BEEN ENTIRELY DESTROYED AND HAVE HAD TO BE PLOWED UP AND OTHER CROPS PLANTED.

ROOSEVELT: .75 TO 2.50 INCHES OF RAIN OVER COUNTY DURING FIRST THREE DAYS OF THE WEEK. SOME FLOOD DAMAGE. TEMPERATURES CONSIDERABLY ABOVE NORMAL DURING LAST PART OF WEEK. GROWING CONDITIONS GOOD FOR FORAGE AND SOME MILLET AND CANE BEING PLANTED SINCE THE RAIN. SMALL GRAINS NOT BENEFITTED BY RAINS. HOPPERS DAMAGING WHAT CROPS REMAIN. LIVESTOCK IN FAIR CONDITION. PASTURES BENEFITTED BY LATE RAINS.

ROSEBUD: SPOTTED SHOWERS BENEFITTED COUNTY ONLY SLIGHTLY. VERY HOT MOST OF WEEK. SUGAR BEETS WHICH HAVE BEEN SAVED FROM INSECTS MAKING GOOD GROWTH. VERY SMALL ACREAGE OF GRAIN, WITH POOR YIELD IN PROSPECT, BEING HARVESTED UNDER IRRIGATION. CHINCH BUGS TAKING ALL CORN AND POTATO FIELDS ALONG THE RIVER. CHANCES OF ANY CORN MATURING VERY SLIGHT. ALL CATTLE AND SHEEP IN SURPRISINGLY GOOD CONDITION. MOVEMENT OF CATTLE TO MARKET INCREASED DURING WEEK. SHEEP BEING SOLD AND SHIPPED TO FEED IN LARGER VOLUME. WATER BEING HAULED TO SEVERAL BANDS OF SHEEP. A FEW FARMERS STARTED TO WORK ON W.P.A. DAM AND ROAD PROJECTS.

SANDERS: PRECIPITATION .10 INCH. ALL DRYLAND CROPS BADLY IN NEED OF RAIN. SPRING GRAINS AND SECOND CUTTING HAY ON DRY LANDS BURNING FROM LACK OF MOISTURE. WINTER WHEAT HARVEST STARTING, WITH EVIDENCE OF NORMAL YIELDS AND GOOD QUALITY. ALFALFA SEED CROP PROMISES FAIR YIELD. SEED PEAS GOOD AND STARTING TO RIPEN. SECOND CUTTING OF HAY UNDER IRRIGATION MAKING FAST GROWTH. NO INSECT DAMAGE. LIVESTOCK IN GOOD CONDITION. RANGE GOOD IN HIGHER ALTITUDES.

SHERIDAN: RAINS APPROXIMATING IN EXCESS OF .75 INCH AT PLENTYWOOD AND 2.98 INCHES AT MEDICINE LAKE ARE REPORTED FOR THE WEEK. HEAVIER PRECIPITATION EAST OF MEDICINE LAKE TO COUNTY LINE RESULTED IN WASHED-OUT ROADS AND INUNDATED VALLEYS. WHILE RECENT RAINS WILL BE OF MATERIAL BENEFIT TO CORN CROPS, IT IS TOO LATE FOR ANY MATERIAL BENEFIT TO GRAIN CROPS FOR HARVEST PURPOSES, PARTICULARLY SINCE RAINS HAVE BEEN FOLLOWED BY EXTREME HOT WEATHER AND HEAVY WINDS. RECENT RAINS HAVE STIMULATED GROWTH OF THISTLES AND TO SOME EXTENT GRASS ON RANGES. BARRING SERIOUS INSECT DAMAGE AND CONTINUED PERIOD OF HOT WEATHER, MOST FARMERS SHOULD BE IN A POSITION TO HARVEST ENOUGH GRAIN HAY TO TAKE CARE OF A NORMAL AMOUNT OF BREEDING STOCK. W.P.A. POISON MIXING PROJECT FOR GRASSHOPPERS SET UP AT RESERVE WHERE A CENTRAL MIXING PLANT IS MAINTAINED. THE GRAN PROVIDED BY THE ENTOMOLOGY DIVISION HAS NOT ARRIVED, BUT TO DATE LEFT OVER SUPPLIES STORED AT VARIOUS PARTS OF THE COUNTY HAVE SUPPLIED THE DEMAND.

STILLWATER: HARVESTING CROPS STARTED IN PARK CITY SECTIONS. IRRIGATION FOR SECOND CUTTING OF ALFALFA STARTED. INTENSIVE POISONING FOR GRASSHOPPERS IN PARK CITY AND ABSARÓKEE AREA IN EFFORT TO GET SECOND CUTTING OF ALFALFA. CONDITION OF LIVESTOCK FAIR TO POOR. CONSIDERABLE MOVEMENT TO MARKET. SOME MOVEMENT OF SHEEP AND CATTLE OUT FOR FEED.

SWEETGRASS: GRAIN IN THE IRRIGATED LANDS IS BEING HARVESTED FOR HAY. ALL LOWLAND PASTURES ARE COMPLETELY GONE IN DRY LAND SECTIONS, AND A LARGE PERCENTAGE OF THE LIVESTOCK HAS BEEN DISPOSED OF. IN A LARGE MAJORITY OF IRRIGATED LANDS THAT HAVE LATE WATER RIGHTS, THE LIVESTOCK IS BEING TURNED INTO THE MEADOWS TO SECURE WHAT LITTLE FEED IS LEFT. SUB-IRRIGATED PASTURES FURNISH THE ONLY AVAILABLE FEED THAT REMAINS ON IRRIGATED RANCHES. LIVESTOCK ON THE RESERVE IS DOING WELL. LIVESTOCK IS BEING MARKETED IN AN ORDERLY MANNER, AND GREATER EFFORTS MADE TO SAVE THE FOUNDATION HERD. INSECT INFESTATION IS STILL SERIOUS IN ALL PARTS OF THE COUNTY.

TETON: ONE SMALL AREA NORTH OF PENDROY REPORTED ONE-HALF INCH RAINFALL, WHICH MAY DO SOME GOOD TO THE LATE WHEAT CROPS, BUT THE SHOWERS OVER THE COUNTY FOR THE MOST PART HAVE BEEN OF NO CONSEQUENCE. CROPS RIPENED VERY RAPIDLY THE PAST WEEK AND THERE WILL UNDOUBTEDLY BE A LOT OF SHRIVELED WHEAT. FIRST CUTTING ALFALFA HAY PRACTICALLY COMPLETED WITH A LITTLE LESS THAN A NORMAL CROP. WILL HAVE TO POISON HOPPERS IN ORDER TO SAVE SECOND CUTTING. PUTTING UP OF WILD HAY HAS BEEN GENERAL THIS PAST WEEK. SOME IRRIGATED WILD HAY ABOUT 70% NORMAL. A CONSIDERABLE ACREAGE OF DRY LAND HAY WAS NOT CUT THIS YEAR. THE LIVESTOCK FEED SITUATION IS VERY SERIOUS. SEVERAL CARLOADS OF DROUTH CATTLE WENT TO MARKET THE PAST WEEK. SEVERAL CARS WILL BE MOVED NEXT WEEK.

TOOLE: WEATHER HOT AND DRY. CROPS BEING CUT FOR HAY. CONTINUED HEAT HAS DAILY DIMINISHED PROSPECTS OF A FEED SUPPLY. GREATER NUMBER OF LIVESTOCK THAN FORMERLY EXPECTED WILL HAVE TO MOVE. RANGE VERY SHORT IN HALF OF COUNTY.

VALLEY: FEW LOCAL SHOWERS, PARTICULARLY IN THE NORTHEASTERN SECTION OF THE COUNTY THE PAST WEEK. SHOWERS ENOUGH TO SETTLE THE DUST IN A FEW OTHER LOCALITIES ONLY. THE FOREPART OF THE WEEK WAS CHARACTERIZED BY MEDIUM COOL WEATHER AND THE BALANCE OF THE WEEK WAS CHARACTERIZED BY HOT WEATHER. A LARGE PER CENT OF THE FARMERS ARE CUTTING WHAT FEED THEY CAN. BLUE JOINT HARVEST IS GETTING UNDER WAY. HAY IS SHORT. THIS WEEK WILL SHOW SOMEWHAT OF AN INCREASE IN THE NUMBER OF LIVESTOCK MOVED OVER PREVIOUS MOVEMENTS IN THE COUNTY. STOCK IS BEGINNING TO SHOW EFFECTS OF THE DROUTH.

WHEATLAND: EXTREMELY HOT AND CONTINUED DRY WEATHER; SOME LIGHT SHOWERS IN SOUTHWESTERN PART OF COUNTY. RANGE IN EASTERN PART OF COUNTY DESTROYED BY DROUTH AND HOPPERS. STOCKMEN IN THE EASTERN PART OF THE COUNTY WILL BE FORCED TO MOVE THEIR STOCK SOON; THERE IS A SHORTAGE OF STOCK WATER IN THE COUNTY.

WIBAUX: EXTREMELY HOT WEATHER, WITH RANGES, PASTURES, AND REMAINING CROPS BURNING. SOME PRECIPITATION DURING THE WEEK AT DIFFERENT STATIONS IN THE COUNTY; REPORTED FROM 0 TO 2.3 INCHES. HEAVY RAINFALL CAME SO FAST THAT IT LARGELY RAN OFF. HEAVY RAIN IN THE SOUTHERN PART OF COUNTY HELPED TO FILL WATER HOLES. RAIN MIGHT ALSO START THISTLES WHICH MIGHT HELP FEED CONDITIONS. GRASSHOPPERS ARE BECOMING MORE NUMEROUS, AND ARE TAKING THE RANGES IN MANY PLACES. LIVESTOCK IS BEING MOVED GRADUALLY.

YELLOWSTONE: RAIN WHICH STARTED LAST SATURDAY APPROXIMATED .83 INCH. IN NON-IRRIGATED DISTRICTS, A SMALL NUMBER OF FIELDS ARE BEING HARVESTED. REPORTS FROM THE NORTHEAST SECTION INDICATE THAT THERE IS PRACTICALLY NO GRAIN WORTH HARVESTING IN THAT AREA. LARGE PERCENTAGE OF WINTER WHEAT FIELDS PREVIOUSLY HARVESTED FOR HAY. ON SOUTH SIDE, SITUATION MUCH THE SAME. IN DUCK CREEK, BLUE CREEK, AND PRYOR CREEK DISTRICTS, YIELDS OF WINTER WHEAT SOMEWHAT BETTER. IN IRRIGATED DISTRICTS, HARVEST OF SPRING GRAIN UNDER WAY. YIELDS LOWER THAN NORMAL DUE TO HOT WEATHER AND GRASSHOPPER DAMAGE. SECOND CROP OF ALFALFA MAKING FAIR GROWTH. MOVEMENT OF LIVESTOCK TO MARKET HAS SLOWED UP. MOST CATTLE GOING TO MARKET RATHER THAN TO PASTURE WITH SOME SHEEP BEING MOVED TO PASTURE.

\* \* \* \* \*

HELENA, MONTANA,  
JULY 22, 1936.

